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Process for the detoxification of aqueous media, and a resin for use therein.

The invention provides a process for detoxifying aqueous media, particularly those containing cyanides by bringing these media into contact with hydrogen peroxide in conjunction with a copper loaded exchanger, and after detoxification, the or another exchanger removing copper from solution to produce an effluent that is low in both cyanide and copper. In a convenient manner of operation, the process can be carried out at ambient temperature by passing an effluent through a copper loaded carboxylate acrylic resin, introducing from 1.5 to 5 moles of hydrogen peroxide per mole of cyanide at pH 9 (approx) and after detoxification, adjusting the effluent to pH 4 (approx) and passing it through a second resin. The invention also provides chelating resins for use in detoxification in which a polymer matrix is substituted by carbamyl groups substituted at the nitrogen atom thereof by one or two alkylene amino groups or di or poly (alkylene amino) groups, the nitrogen atoms of which amino groups being so located in the amino chain that they can chelate with a metal ion.



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EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	<u>DE - B - 1 290 495</u> (BUDENHEIM) + Column 2, lines 46-68; column 3, lines 1-8; claim 1 + --	1,4	C 02 F 1/42 C 02 F 1/72 B 01 J 39/00 B 01 J 45/00
	<u>US - A - 3 617 567</u> (OWEN BERTWELL MATHRE) + Column 1, lines 32-37, 50-54 + --	1	
	<u>DD - A - 10 283</u> (VEB WOLFEN) + Claim; page 2, lines 17-91 + ----	1,2	TECHNICAL FIELDS SEARCHED (Int. Cl. ³) C 02 F B 01 J C 25 D
			CATEGORY OF CITED DOCUMENTS X: particularly relevant A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention E: conflicting application D: document cited in the application L: citation for other reasons &: member of the same patent family, corresponding document
X	The present search report has been drawn up for all claims		
Place of search VIENNA		Date of completion of the search 01-07-1981	Examiner WILFLINGER